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	Application No.	Applicant(s)
Nation of Allered Hiller	10/705,672	CLARK, WILLIAM T.
Notice of Allowability	Examiner	Art Unit
	William H. Mayo III	2831
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>May 6, 2005</u> .		
2. The allowed claim(s) is/are <u>7-9 and 11-30</u> .		
3. The drawings filed on <u>06 May 2005</u> are accepted by the Examiner.		
4. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftsperson.	been received. been received in Application No cuments have been received in this r of this communication to file a reply of ENT of this application. tted. Note the attached EXAMINER's s reason(s) why the oath or declarate t be submitted.	complying with the requirements S AMENDMENT or NOTICE OF ion is deficient.
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summary (Paper No./Mail Date B), 7. ☑ Examiner's Amendm	<u> </u>

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EXAMINER'S AMENDMENT

- 1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 2. The application has been amended as follows:
 - a) Please cancel claims 1-6.
 - b) In claim 11, replace the numerical "10" with the numerical -9--.

Allowable Subject Matter

- 3. Claims 7-9 and 11-30 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: This invention deals with a shielded cable comprising a plurality of twisted pairs of insulated conductors, a core disposed between the plurality of twisted pairs of insulated conductors, wherein a dual jacket encloses the core and the plurality of twisted pairs of insulated conductors, wherein the dual jacket includes first and second jacket layers with a shield disposed between the first and second jacket layers, wherein at least one of the first and second jacket layers comprises a plurality of protrusions (claim 7). This invention also deal with a bundled cable comprising a first cable comprising a plurality of twisted pairs of insulated conductors and a first separator arranged between the plurality of twisted pairs so as to separate one of the plurality of twisted pairs from

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others of the plurality of twisted pairs, wherein the first cable has a first jacket, a second cable having a second jacket, wherein each of the first and second jackets comprise a plurality of protrusions, wherein the plurality of protrusions of the first jacket are inwardly projecting and having a first spacing sufficiently small so as to prevent any one of the plurality of twisted pairs of insulated conductors from lying between adjacent ones of the plurality of protrusions (claim 9). This invention also deal with a bundled cable comprising a first cable comprising a plurality of twisted pairs of insulated conductors and a first separator arranged between the plurality of twisted pairs so as to separate one of the plurality of twisted pairs from others of the plurality of twisted pairs, wherein the first cable has a first jacket, a second cable having a second jacket, wherein each of the first and second jackets comprise a plurality of protrusions, wherein the plurality of protrusions of the first jacket are outwardly projecting and having a first spacing sufficiently small so as to prevent any one of the plurality of twisted pairs of insulated conductors from lying between adjacent ones of the plurality of protrusions (claim 12). This invention also deal with a cable comprising a plurality of twisted pairs of insulated conductors including a first twisted pair and a second twisted pair, a core disposed between the plurality of twisted pairs of insulated conductors so as to separate the first twisted pair from the second twisted pair, wherein the first and second twist lays and the first and second nominal impedances are selected such that a skew between the first and second twisted pairs is less than about 21 nanoseconds per 100 meters and a difference between the first and second nominal impedances is between approximately 2 Ohms and 15 Ohms (claim 15). This invention also deals with a plurality of twisted

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pairs of insulated conductors, a separator arranged between the plurality of twisted pairs so as to separate one of the plurality of twisted pairs from others of the plurality of twisted pairs; and a first jacket surrounding the plurality of twisted pairs and the separator; and a second jacket surrounding the first jacket, wherein at least one of the first jacket and the second jacket comprises a plurality of protrusions extending away from a surface of the respective one of the first jacket and the second jacket (claim 21). This invention also deals with a bundle cable comprising a first cable including a plurality of twisted pairs of insulated conductors and a first jacket, wherein the first jacket including a first plurality of projections extending outwardly from an outer surface of the first jacket; a second cable including a plurality of twisted pairs of insulated conductors and a second jacket, the second jacket including a second plurality of outwardly projecting protrusions; wherein the first cable is twisted in a helical manner with a first cable lay so as to provide a first twisted cable; wherein the second cable is twisted in a helical manner with a second cable lay so as to provide a second twisted cable', and wherein the bundled cable further comprises an overall jacket surrounding the first and second twisted cables along a length of the bundled cable (claim 29). The above stated claim limitations, in combination with other claim limitations, is not taught or suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Response to Arguments

5. Applicant's arguments filed May 6, 2005 have been fully considered and they are persuasive. Specifically, the applicant's arguments that "Gareis doesn't disclose either the inner or outer jacket having protrusions", "Neither of Clark nor Clark2 disclose the plurality of protrusions of the first jacket being inwardly or outwardly projecting and having a first spacing sufficiently small so as to prevent any one of the plurality of twisted pairs of insulated conductors from lying between adjacent ones of the plurality of protrusions", and that "neither Friesen and Gaeris teach or suggest the first and second twist lays and the first and second nominal impedances being selected such that a skew between the first and second twisted pairs is less than about 21 nanoseconds per 100 meters and a difference between the first and second nominal impedances is between approximately 2-15 Ohms", is persuasive and therefore the claims having been allowed.

Communication

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> **Primary Examiner** Art Unit 2831

WHM III June 18, 2005 105

pairs

Applicant: William T. Clark
U.S.S.N.: 10705,672
Entitled: Data Cable With Cross-Twist Cabled Core Profile
Our Ref. No.: M0506-703330
ANNOTATED SHEET SHOWING CHANGES

105 105 -103 103 cross hatching has been added to all buisted -107 109 103

FIG. 1

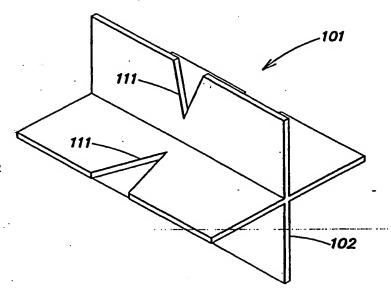


FIG. 2